

Trying 3106016892...Open

09/713,512

Welcome to STN International! Enter x:  
Welcome to STN International! Enter x:x  
LOGINID:sssptaul29pxo  
PASSWORD:  
TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 Sep 17 IMSworld Pharmaceutical Company Directory name change  
to PHARMASEARCH  
NEWS 3 Oct 09 Korean abstracts now included in Derwent World Patents  
Index  
NEWS 4 Oct 09 Number of Derwent World Patents Index updates increased  
NEWS 5 Oct 15 Calculated properties now in the REGISTRY/ZREGISTRY File  
NEWS 6 Oct 22 Over 1 million reactions added to CASREACT  
NEWS 7 Oct 22 DGENE GETSIM has been improved  
NEWS 8 Oct 29 AAASD no longer available  
NEWS 9 Nov 19 New Search Capabilities USPATFULL and USPAT2  
NEWS 10 Nov 19 TOXCENTER(SM) - new toxicology file now available on STN  
NEWS 11 Nov 29 COPPERLIT now available on STN  
NEWS 12 Nov 29 DWPI revisions to NTIS and US Provisional Numbers  
NEWS 13 Nov 30 Files VETU and VETB to have open access  
NEWS 14 Dec 10 WPINDEX/WPIDS/WPIX New and Revised Manual Codes for 2002  
NEWS 15 Dec 10 DGENE BLAST Homology Search  
NEWS 16 Dec 17 WELDASEARCH now available on STN  
NEWS 17 Dec 17 STANDARDS now available on STN  
NEWS 18 Dec 17 New fields for DPCI  
NEWS 19 Dec 19 CAS Roles modified  
NEWS 20 Dec 19 1907-1946 data and page images added to CA and CAPlus  
NEWS 21 Jan 25 BLAST(R) searching in REGISTRY available in STN on the Web  
NEWS 22 Jan 25 Searching with the P indicator for Preparations  
NEWS 23 Jan 29 FSTA has been reloaded and moves to weekly updates  
NEWS 24 Feb 01 DKILIT now produced by FIZ Karlsruhe and has a new update  
frequency  
NEWS 25 Feb 19 Access via Tymnet and SprintNet Eliminated Effective 3/31/02  
NEWS 26 Mar 08 Gene Names now available in BIOSIS  
NEWS 27 Mar 22 TOXLIT no longer available  
NEWS 28 Mar 22 TRCTHERMO no longer available  
  
NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0d,  
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),  
AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that  
specific topic.

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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 13:23:15 ON 23 MAR 2002

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.75

0.75

FILE 'REGISTRY' ENTERED AT 13:26:14 ON 23 MAR 2002

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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STRUCTURE FILE UPDATES: 20 MAR 2002 HIGHEST RN 402467-99-6

DICTIONARY FILE UPDATES: 20 MAR 2002 HIGHEST RN 402467-99-6

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES  
for more information. See STNote 27, Searching Properties in the CAS  
Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

The P indicator for Preparations was not generated for all of the  
CAS Registry Numbers that were added to the H/Z/CA/CAplus files between  
12/27/01 and 1/23/02. Use of the P indicator in online and SDI searches  
during this period, either directly appended to a CAS Registry Number  
or by qualifying an L-number with /P, may have yielded incomplete results.  
As of 1/23/02, the situation has been resolved. Also, note that searches  
conducted using the PREP role indicator were not affected.

Customers running searches and/or SDIs in the H/Z/CA/CAplus files  
incorporating CAS Registry Numbers with the P indicator between 12/27/01  
and 1/23/02, are encouraged to re-run these strategies. Contact the  
CAS Help Desk at 1-800-848-6533 in North America or 1-614-447-3698,  
worldwide, or send an e-mail to [help@cas.org](mailto:help@cas.org) for further assistance or to  
receive a credit for any duplicate searches.

=>

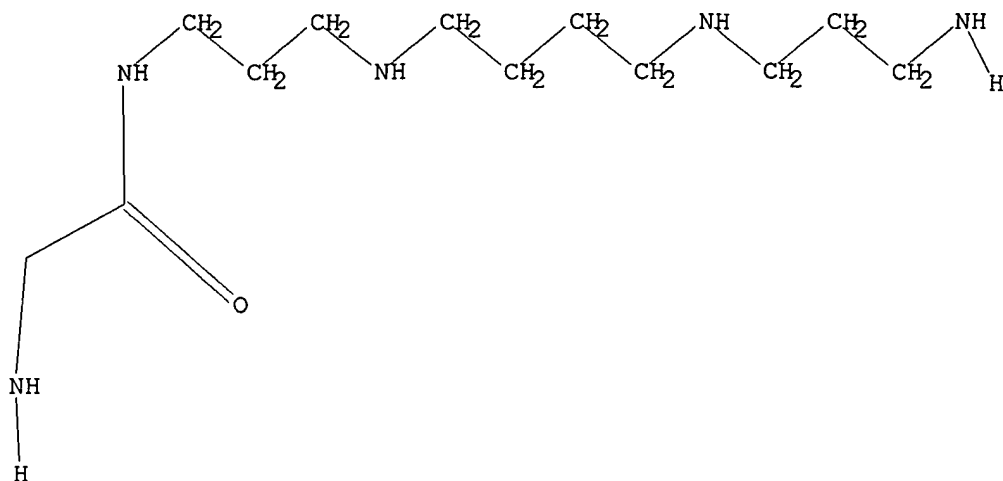
Uploading 523.str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 13:26:43 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 141 TO ITERATE

100.0% PROCESSED 141 ITERATIONS 2 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 2108 TO 3532  
PROJECTED ANSWERS: 2 TO 124

L2 2 SEA SSS SAM L1

=> search l1

ENTER TYPE OF SEARCH (SSS), CSS, FAMILY, OR EXACT:.  
ENTER SCOPE OF SEARCH (SAMPLE), FULL, RANGE, OR SUBSET:ful  
FULL SEARCH INITIATED 13:26:58 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 2814 TO ITERATE

100.0% PROCESSED 2814 ITERATIONS 59 ANSWERS  
SEARCH TIME: 00.00.01

L3 59 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	140.22	140.97

FILE 'CAPLUS' ENTERED AT 13:27:02 ON 23 MAR 2002  
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FILE COVERS 1907 - 23 Mar 2002 VOL 136 ISS 13  
FILE LAST UPDATED: 21 Mar 2002 (20020321/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the CAS files between 12/27/01 and 1/23/02. As of 1/23/02, the situation has been resolved. Searches and/or SDIs in the H/Z/CA/CAPLUS files incorporating CAS Registry Numbers with the P indicator executed between 12/27/01 and 1/23/02 may be incomplete. See the NEWS message on this topic for more information.

=> s 13

L4 10 L3

=> d 14 fbib ab hitstr 1-10

L4 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2002 ACS  
AN 2001:886056 CAPLUS  
DN 136:15226  
TI Novel polyamine transport-inhibiting polyamine analogues as therapeutic and diagnostic agents  
IN Vermeulin, Nicolaas M. J.; O'day, Christine L.; Webb, Heather K.; Burns, Mark R.; Bergstrom, Donald E.  
PA Oridigm Corporation, USA  
SO PCT Int. Appl., 102 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001092218	A2	20011206	WO 2001-US17795	20010531
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SI, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
				US 2000-584175 A	20000531

AB Novel "bispolyamine" inhibitor compds. of polyamine transport are disclosed. These compds. are useful pharmaceutical agents for treating diseases where it is desired to inhibit polyamine transport or other polyamine binding proteins, for example cancer and post-angioplasty injury. These compds. display desirable activities both for diagnostic and research assays and therapy. Most of the spermine dimers that have been tested provided very good  $K_i$  for transport inhibition with values under 75 nM. ORI 1236 (I) was the most potent inhibitor with a  $K_i$  of 22 nM. The results were generally mirrored in the growth inhibition assay. All of the compds. were synergistic with difluoromethylornithine, a polyamine synthesis inhibitor, with  $IC_{50}$  values of 10  $\mu$ M or less.

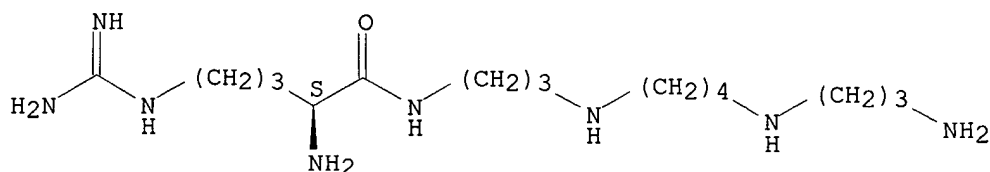
IT 134950-94-0 134951-06-7 207501-47-1  
 220221-40-9 220221-58-9 220221-61-4  
 220221-68-1 220221-70-5 220221-75-0  
 220221-77-2 220221-83-0 287968-61-0  
 330162-75-9 330162-81-7 330162-89-5  
 330162-90-8 330162-91-9 330162-93-1  
 330162-94-2 330162-97-5 330162-98-6  
 330162-99-7 330163-00-3 330163-01-4  
 377726-20-0 377726-21-1

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (novel polyamine transport-inhibiting polyamine analogs as therapeutic and diagnostic agents)

RN 134950-94-0 CAPLUS

CN Pentanamide, 2-amino-5-[(aminoiminomethyl)amino]-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (2S)- (9CI) (CA INDEX NAME)

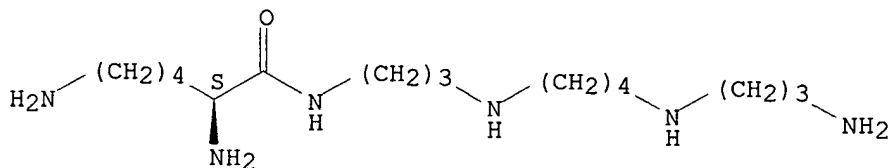
Absolute stereochemistry.



RN 134951-06-7 CAPLUS

CN Hexanamide, 2,6-diamino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (2S)- (9CI) (CA INDEX NAME)

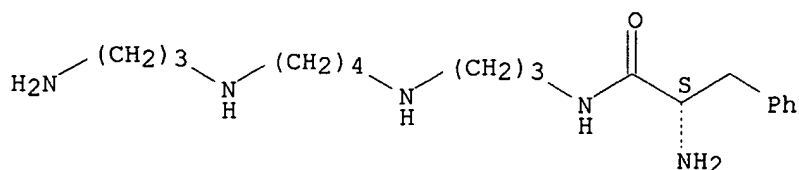
Absolute stereochemistry.



RN 207501-47-1 CAPLUS

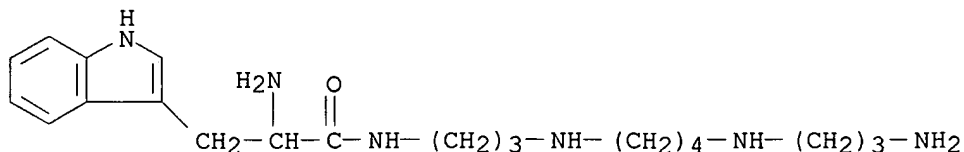
CN Benzenepropanamide, .alpha.-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



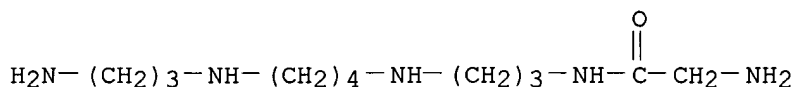
RN 220221-40-9 CAPLUS

CN 1H-Indole-3-propanamide, .alpha.-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]- (9CI) (CA INDEX NAME)



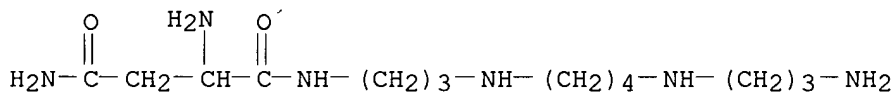
RN 220221-58-9 CAPLUS

CN Acetamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]- (9CI) (CA INDEX NAME)



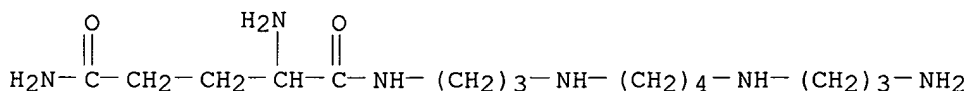
RN 220221-61-4 CAPLUS

CN Butanediamide, 2-amino-N1-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]- (9CI) (CA INDEX NAME)



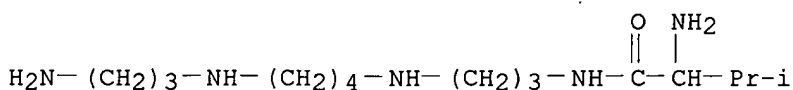
RN 220221-68-1 CAPLUS

CN Pentanediamide, 2-amino-N1-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]- (9CI) (CA INDEX NAME)

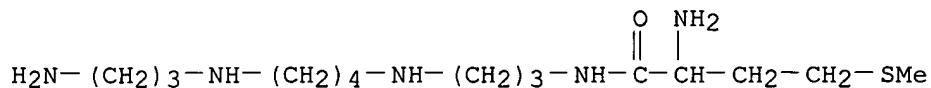


RN 220221-70-5 CAPLUS

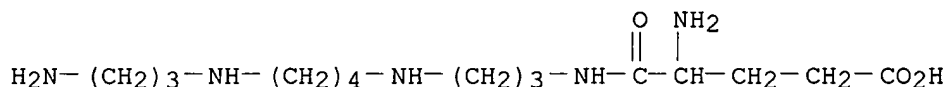
CN Butanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-3-methyl- (9CI) (CA INDEX NAME)



RN 220221-75-0 CAPLUS  
 CN Butanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-4-(methylthio)- (9CI) (CA INDEX NAME)

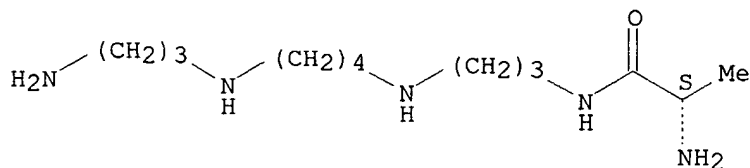


RN 220221-77-2 CAPLUS  
 CN Pentanoic acid, 4-amino-5-[[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]amino]-5-oxo- (9CI) (CA INDEX NAME)



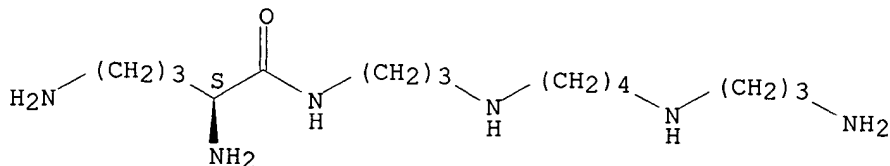
RN 220221-83-0 CAPLUS  
 CN Propanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 287968-61-0 CAPLUS  
 CN Pentanamide, 2,5-diamino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (2S)- (9CI) (CA INDEX NAME)

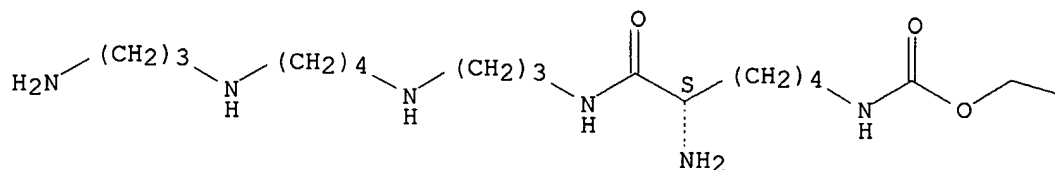
Absolute stereochemistry.



RN 330162-75-9 CAPLUS  
 CN 2,9,13,18-Tetraazaheneicosanoic acid, 7,21-diamino-8-oxo-, phenylmethyl ester, (7S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



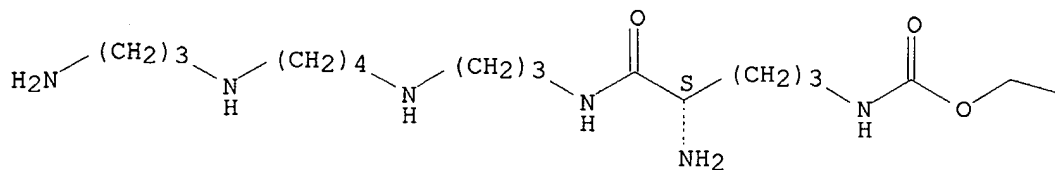
PAGE 1-B

— Ph

RN 330162-81-7 CAPLUS  
CN 2,8,12,17-Tetraazaeicosanoic acid, 6,20-diamino-7-oxo-, phenylmethyl ester, (6S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

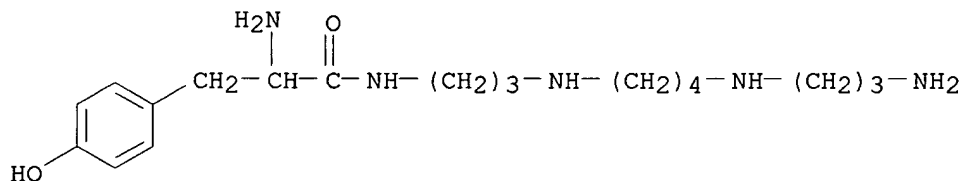
PAGE 1-A



PAGE 1-B

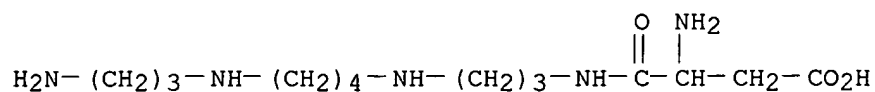
— Ph

RN 330162-89-5 CAPLUS  
CN Benzenepropanamide, .alpha.-amino-N-[3-[[4-[(3-aminopropyl) amino] butyl] amino] propyl]-4-hydroxy- (9CI) (CA INDEX NAME)



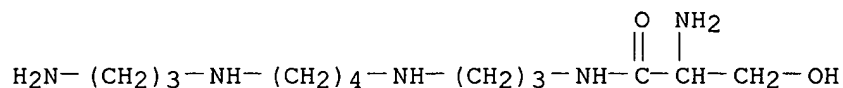
RN 330162-90-8 CAPLUS  
CN Butanoic acid, 3-amino-4-[[3-[[4-[(3-aminopropyl) amino] butyl] amino] propyl] amino]-4-oxo- (9CI) (CA INDEX NAME)





RN 330162-91-9 CAPLUS

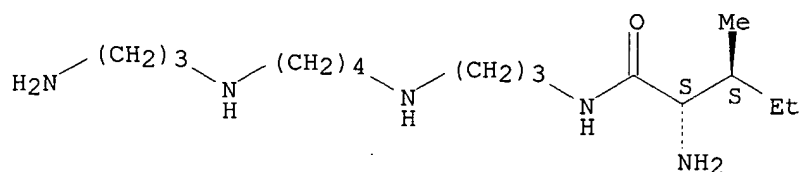
CN Propanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-3-hydroxy- (9CI) (CA INDEX NAME)



RN 330162-93-1 CAPLUS

CN Pentanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-3-methyl-, (2S,3S)- (9CI) (CA INDEX NAME)

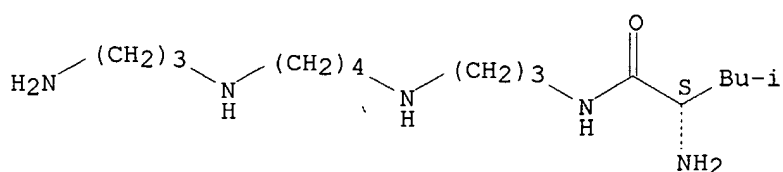
Absolute stereochemistry.



RN 330162-94-2 CAPLUS

CN Pentanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

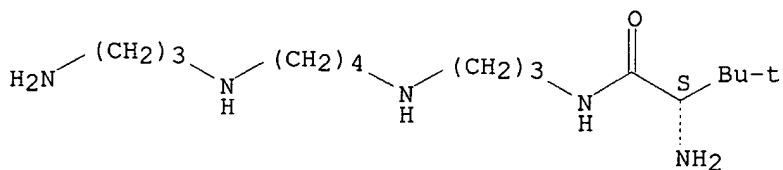
Absolute stereochemistry.



RN 330162-97-5 CAPLUS

CN Butanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-3,3-dimethyl-, (2S)- (9CI) (CA INDEX NAME)

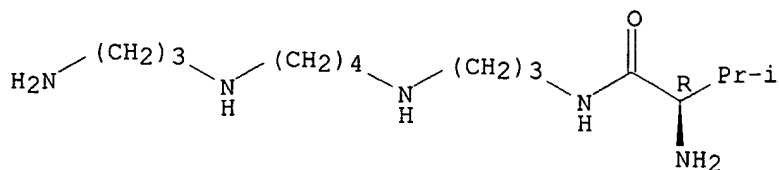
Absolute stereochemistry.



RN 330162-98-6 CAPLUS

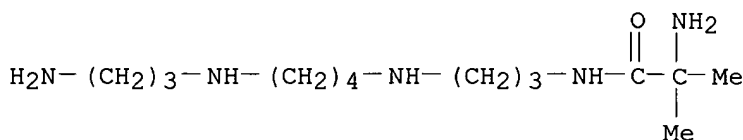
CN Butanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-3-methyl-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 330162-99-7 CAPLUS

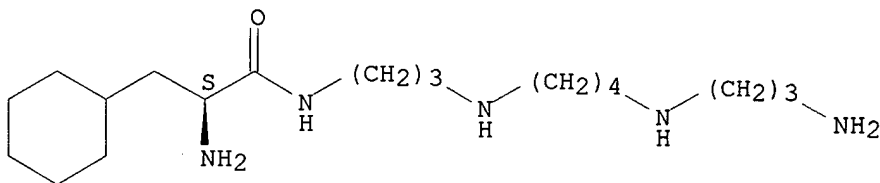
CN Propanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-2-methyl-, (9CI) (CA INDEX NAME)



RN 330163-00-3 CAPLUS

CN Cyclohexanepropanamide, .alpha.-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (.alpha.S)- (9CI) (CA INDEX NAME)

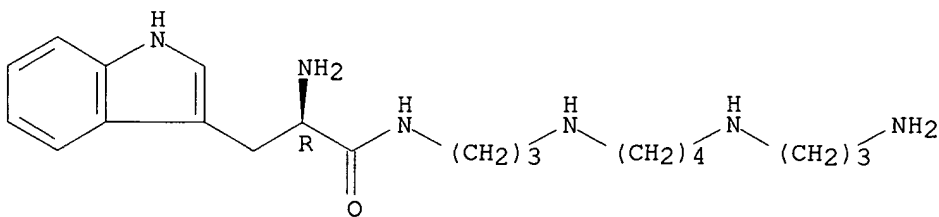
Absolute stereochemistry.



RN 330163-01-4 CAPLUS

CN 1H-Indole-3-propanamide, .alpha.-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (.alpha.R)- (9CI) (CA INDEX NAME)

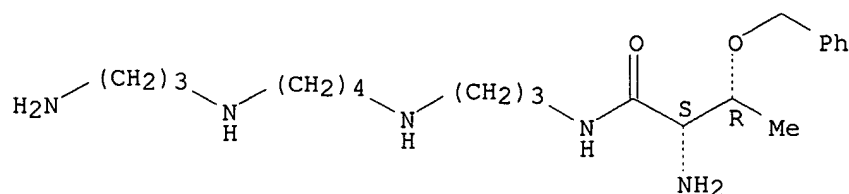
Absolute stereochemistry.



RN 377726-20-0 CAPLUS

CN Butanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-3-(phenylmethoxy)-, (2S,3R)- (9CI) (CA INDEX NAME)

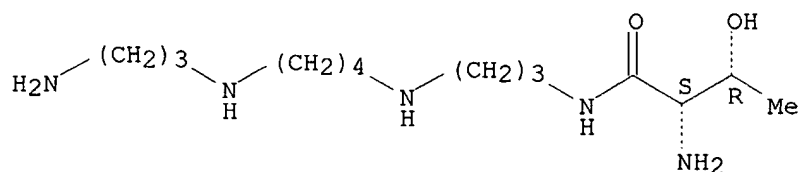
Absolute stereochemistry.



RN 377726-21-1 CAPLUS

CN Butanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-3-hydroxy-, (2S,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2002 ACS

AN 2001:872191 CAPLUS

DN 136:130628

TI Novel spermine-Amino acid conjugates and basic tripeptides enhance cleavage of the hairpin ribozyme at low magnesium ion concentration

AU Stolze, Karen; Holmes, Stephen C.; Earnshaw, David J.; Singh, Mohinder; Stetsenko, Dmitry; Williams, Donna; Gait, Michael J.

CS Laboratory of Molecular Biology, Medical Research Council, Cambridge, CB2 2QH, UK

SO Bioorganic & Medicinal Chemistry Letters (2001), 11(23), 3007-3010

CODEN: BMCLE8; ISSN: 0960-894X

PB Elsevier Science Ltd.

DT Journal

LA English

AB Combinations of the polyamine spermine and magnesium ions synergize to dramatically enhance cleavage of the hairpin ribozyme. Certain synthetic basic tripeptides stimulate hairpin cleavage significantly at limiting magnesium ion concn., notably the tripeptide of L-diaminobutyric acid (Dab). Of a range of novel synthetic spermine-amino acid conjugates, L-Dab-spermine (but not D-Dab nor other amino acid conjugates) was more effective than spermine itself.

IT 134950-94-0P 134951-06-7P 220221-58-9P

392298-27-0P 392298-28-1P 392298-29-2P

392298-30-5P 392298-31-6P 392298-32-7P

392298-33-8P 392298-34-9P

RL: BSU (Biological study, unclassified); PNU (Preparation, unclassified);

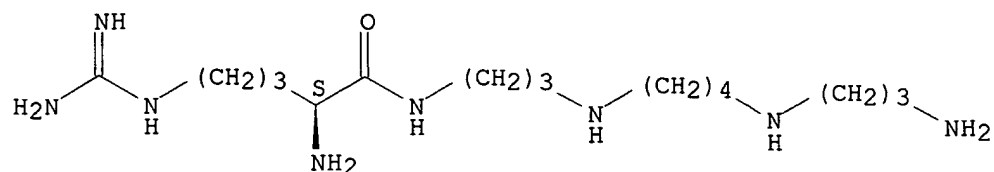
BIOL (Biological study); PREP (Preparation)

(novel spermine-amino acid conjugates and basic tripeptides enhance hairpin ribozyme activity at low Mg<sup>2+</sup> concn.)

RN 134950-94-0 CAPLUS

CN Pentanamide, 2-amino-5-[(aminoiminomethyl)amino]-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (2S)- (9CI) (CA INDEX NAME)

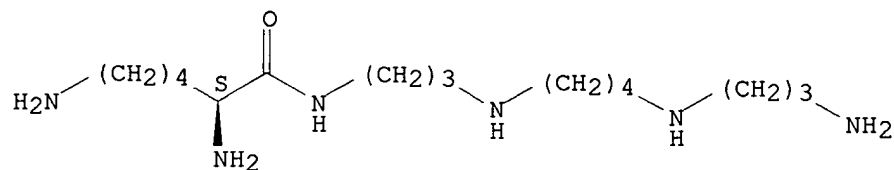
Absolute stereochemistry.



RN 134951-06-7 CAPLUS

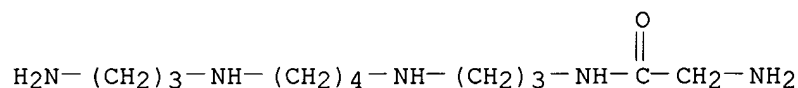
CN Hexanamide, 2,6-diamino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 220221-58-9 CAPLUS

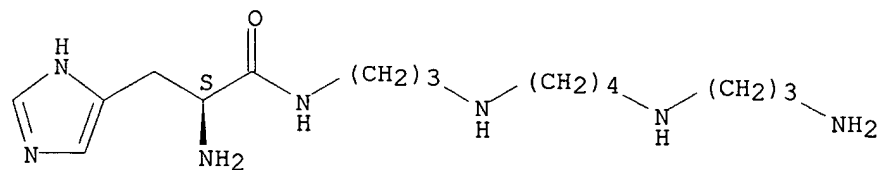
CN Acetamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (9CI) (CA INDEX NAME)



RN 392298-27-0 CAPLUS

CN 1H-Imidazole-4-propanamide, .alpha.-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (.alpha.S)- (9CI) (CA INDEX NAME)

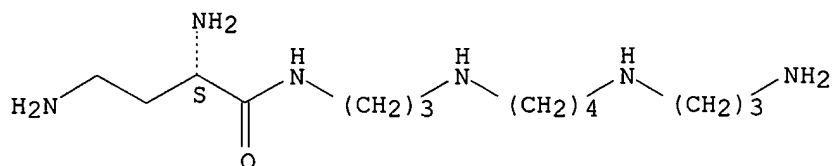
Absolute stereochemistry.



RN 392298-28-1 CAPLUS

CN Butanamide, 2,4-diamino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (2S)- (9CI) (CA INDEX NAME)

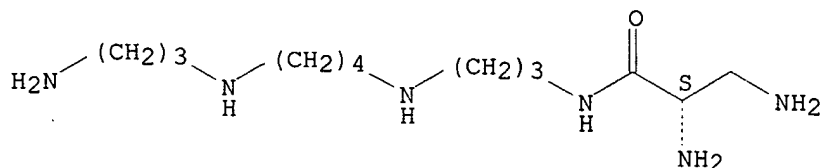
Absolute stereochemistry.



RN 392298-29-2 CAPLUS

CN Propanamide, 2,3-diamino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (2S)- (9CI) (CA INDEX NAME)

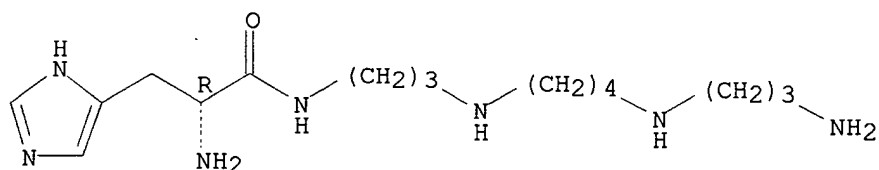
Absolute stereochemistry.



RN 392298-30-5 CAPLUS

CN 1H-Imidazole-4-propanamide, .alpha.-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (.alpha.R)- (9CI) (CA INDEX NAME)

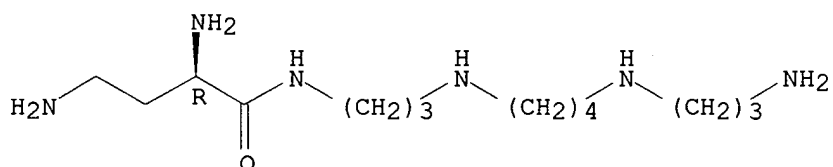
Absolute stereochemistry.



RN 392298-31-6 CAPLUS

CN Butanamide, 2,4-diamino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (2R)- (9CI) (CA INDEX NAME)

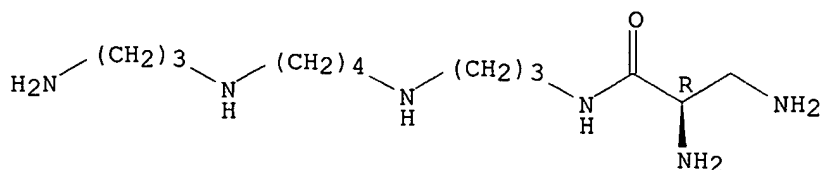
Absolute stereochemistry.



RN 392298-32-7 CAPLUS

CN Propanamide, 2,3-diamino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (2R)- (9CI) (CA INDEX NAME)

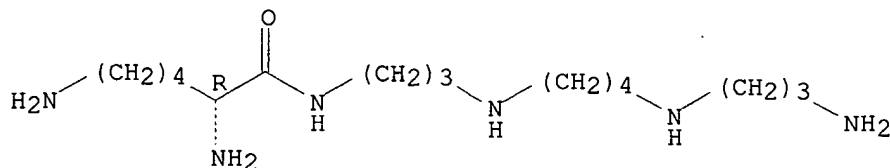
Absolute stereochemistry.



RN 392298-33-8 CAPLUS

CN Hexanamide, 2,6-diamino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-(2R)- (9CI) (CA INDEX NAME)

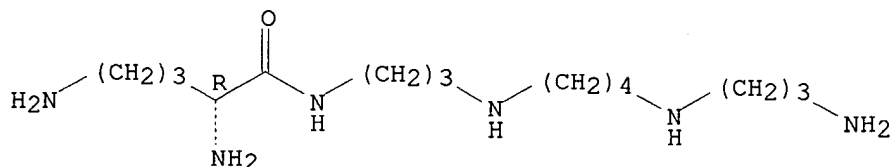
Absolute stereochemistry.



RN 392298-34-9 CAPLUS

CN Pentanamide, 2,5-diamino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-(2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2002 ACS

AN 2001:677296 CAPLUS

DN 136:6310

TI Amino Acid/Spermine Conjugates: Polyamine Amides as Potent Spermidine Uptake Inhibitors

AU Burns, Mark R.; Carlson, C. Lance; Vanderwerf, Scott M.; Ziemer, Josh R.; Weeks, Reitha S.; Cai, Feng; Webb, Heather K.; Graminski, Gerard F.

CS Oridigm Corporation, Seattle, WA, 98103, USA

SO Journal of Medicinal Chemistry (2001), 44(22), 3632-3644

CODEN: JMCMAR; ISSN: 0022-2623

PB American Chemical Society

DT Journal

LA English

AB The authors describe the synthesis and characterization of a series of simple amino acid amides of spermine, some of which potentially inhibit the uptake of spermidine into MDA-MB-231 breast cancer cells. The presence of an amide in the functionalized polyamine appeared to add to the affinity for the polyamine transporter. The extensive biol. characterization of an esp. potent analog from this series, spermine lysinamide, H-Lys-NH(CH<sub>2</sub>)<sub>3</sub>NH(CH<sub>2</sub>)<sub>4</sub>NH(CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub> (I), showed that this mol. will be an

extremely useful tool for use in polyamine research. It was obsd. that the use of I in combination with DFMO led to a cytostatic growth inhibition of a variety of cancer cells, even when used in the presence of an extracellular source of transportable spermidine. It was furthermore shown that this combination effectively reduced the cellular levels of putrescine and spermidine while not affecting the levels of spermine. These facts together with the nontoxic nature of I make it a novel lead for further anticancer development.

IT **374783-07-0P**

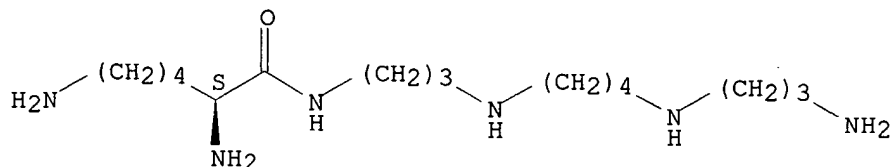
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(most potent; prepn. of amino acid amides of spermine as potent inhibitors of spermidine uptake by breast cancer cells)

RN 374783-07-0 CAPLUS

CN Hexanamide, 2,6-diamino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, pentahydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



●5 HCl

IT **374782-89-5P 374782-91-9P 374782-92-0P**

**374782-93-1P 374782-94-2P 374782-95-3P**

**374782-96-4P 374782-97-5P 374782-99-7P**

**374783-01-4P 374783-02-5P 374783-03-6P**

**374783-04-7P 374783-05-8P 374783-06-9P**

**374783-08-1P 374783-09-2P 374783-10-5P**

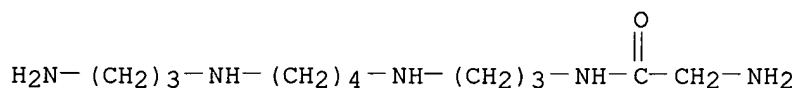
**374783-11-6P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. of amino acid amides of spermine as potent inhibitors of spermidine uptake by breast cancer cells)

RN 374782-89-5 CAPLUS

CN Acetamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, tetrahydrochloride (9CI) (CA INDEX NAME)

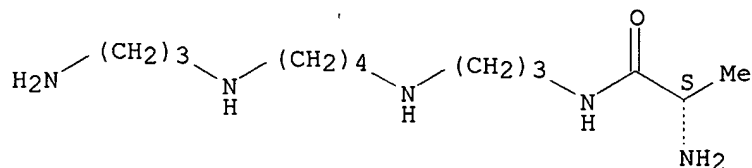


●4 HCl

RN 374782-91-9 CAPLUS

CN Propanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, tetrahydrochloride, (2S)- (9CI) (CA INDEX NAME)

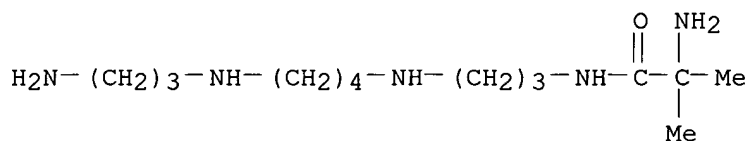
Absolute stereochemistry.



● 4 HCl

RN 374782-92-0 CAPLUS

CN Propanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-2-methyl-, tetrahydrochloride (9CI) (CA INDEX NAME)

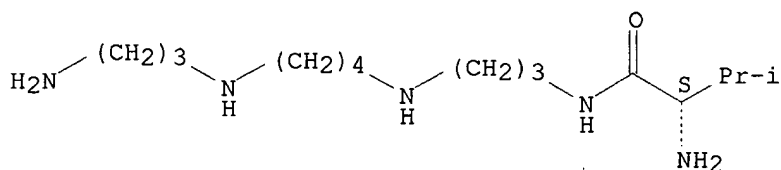


● 4 HCl

RN 374782-93-1 CAPLUS

CN Butanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-3-methyl-, tetrahydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



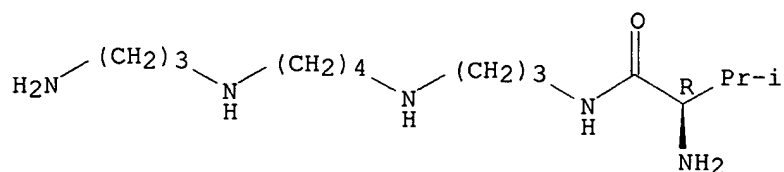
● 4 HCl

RN 374782-94-2 CAPLUS

CN Butanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-3-methyl-, tetrahydrochloride, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



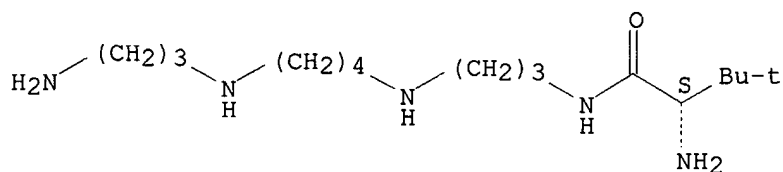


● 4 HCl

RN 374782-95-3 CAPLUS

CN Butanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-3,3-dimethyl-, tetrahydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

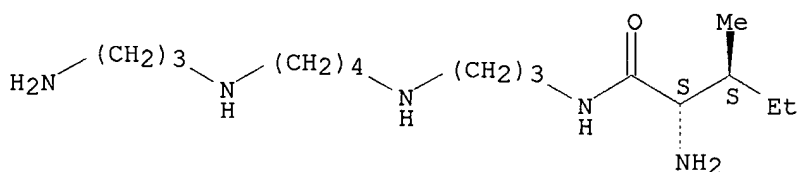


● 4 HCl

RN 374782-96-4 CAPLUS

CN Pentanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-3-methyl-, tetrahydrochloride, (2S,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

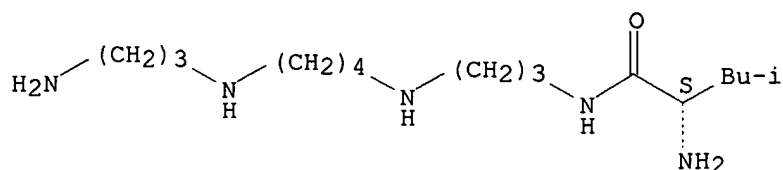


● 4 HCl

RN 374782-97-5 CAPLUS

CN Pentanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-4-methyl-, tetrahydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

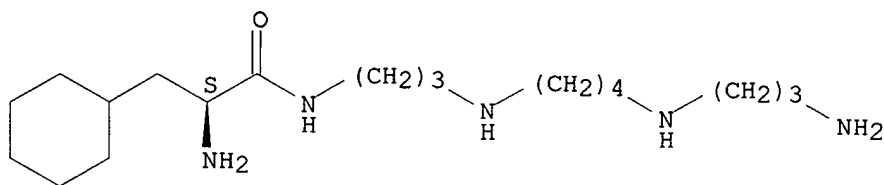


● 4 HCl

RN 374782-99-7 CAPLUS

CN Cyclohexanepropanamide, .alpha.-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, tetrahydrochloride, (.alpha.S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

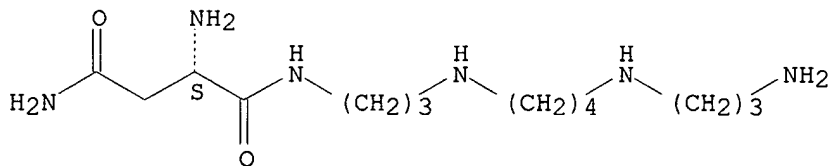


● 4 HCl

RN 374783-01-4 CAPLUS

CN Butanediamide, 2-amino-N1-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, tetrahydrochloride, (2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

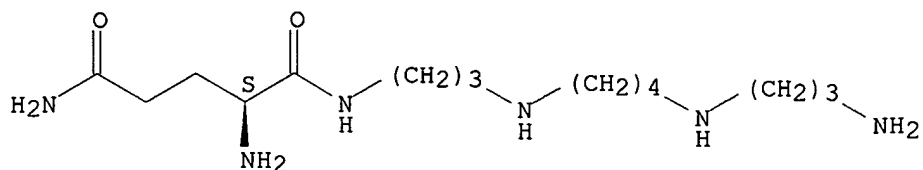


● 4 HCl

RN 374783-02-5 CAPLUS

CN Pentanediamide, 2-amino-N1-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, tetrahydrochloride, (2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

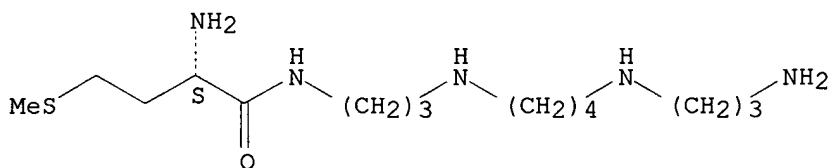


● 4 HCl

RN 374783-03-6 CAPLUS

CN Butanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-4-(methylthio)-, tetrahydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

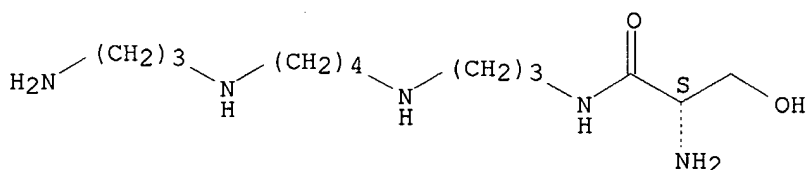


● 4 HCl

RN 374783-04-7 CAPLUS

CN Propanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-3-hydroxy-, tetrahydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

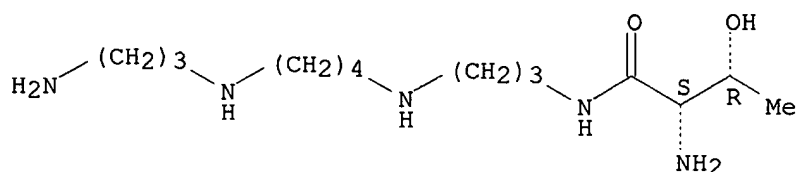


● 4 HCl

RN 374783-05-8 CAPLUS

CN Butanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-3-hydroxy-, tetrahydrochloride, (2S,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

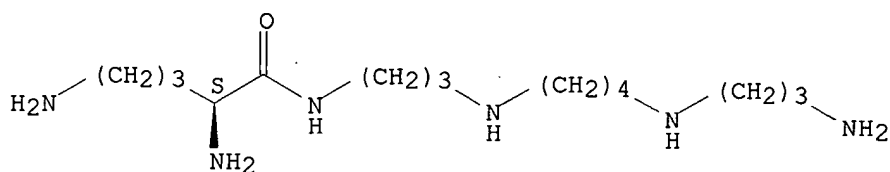


●4 HCl

RN 374783-06-9 CAPLUS

CN Pentanamide, 2,5-diamino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, pentahydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

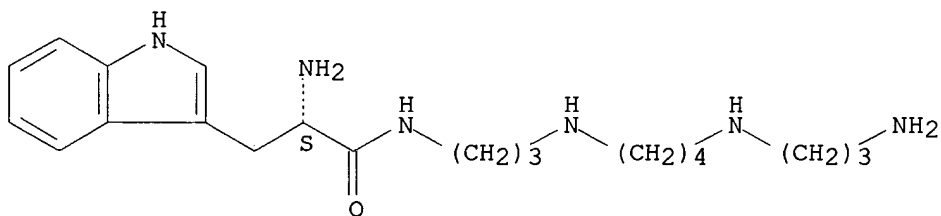


●5 HCl

RN 374783-08-1 CAPLUS

CN 1H-Indole-3-propanamide, .alpha.-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, tetrahydrochloride, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

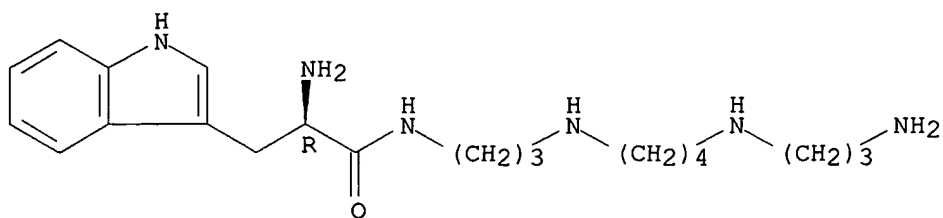


●4 HCl

RN 374783-09-2 CAPLUS

CN 1H-Indole-3-propanamide, .alpha.-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, tetrahydrochloride, (.alpha.R)- (9CI) (CA INDEX NAME)

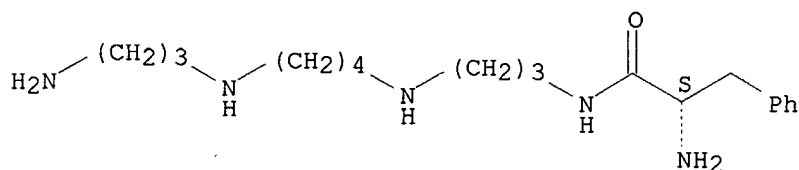
Absolute stereochemistry.



● 4 HCl

RN 374783-10-5 CAPLUS  
 CN Benzenepropanamide, .alpha.-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, tetrahydrochloride, (.alpha.S)- (9CI) (CA INDEX NAME)

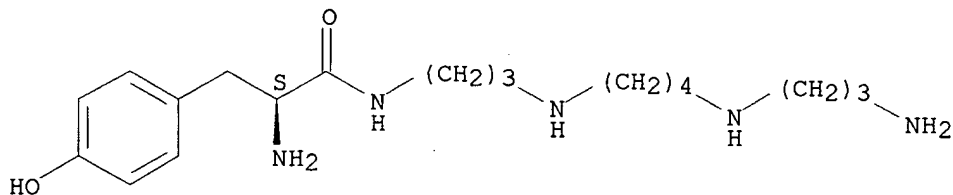
Absolute stereochemistry.



● 4 HCl

RN 374783-11-6 CAPLUS  
 CN Benzenepropanamide, .alpha.-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-4-hydroxy-, tetrahydrochloride, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● 4 HCl

RE.CNT 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2002 ACS  
 AN 2001:207925 CAPLUS  
 DN 134:237682

TI Novel polyamine analogues as therapeutic and diagnostic agents  
 IN Vermeulin, Nicholaas M. J.; O'Day, Christine L.; Webb, Heather K.; Burns, Mark R.; Bergstrom, Donald E.  
 PA Oridigm Corporation, USA  
 SO Eur. Pat. Appl., 140 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1085011	A1	20010321	EP 2000-308049	20000915
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2001172244	A2	20010626	US 1999-396523 A	19990915
				JP 2000-282752	20000918
				US 1999-396523 A	19990915

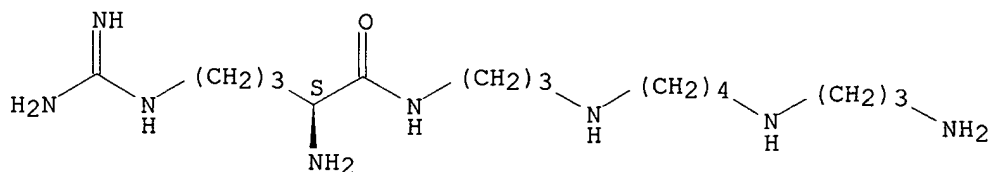
AB Novel inhibitors of polyamine transport having inhibition consts. two orders of magnitude lower than those of known compds. are disclosed. These polyamine analogs are useful pharmaceutical agents for treating disease where it is desired to inhibit polyamine transport or other polyamine binding proteins, for example cancer and post-angioplasty injury. Novel chem. synthetic methods to obtain polyamine analogs are disclosed, including the prodn. of a combinatorial polyamine library. These approaches yield analogs with desirable activities both for diagnostic and research assays and therapy. The assays of the invention are useful for high throughput screening of targets in the discovery of drugs that interact with the polyamine system.

IT 134950-94-0P 134951-06-7P 207501-47-1P  
 220221-40-9P 220221-58-9P 220221-61-4P  
 220221-68-1P 220221-70-5P 220221-75-0P  
 220221-77-2P 220221-83-0P 287968-61-0P  
 330162-58-8P 330162-75-9P 330162-78-2P  
 330162-81-7P 330162-89-5P 330162-90-8P  
 330162-91-9P 330162-92-0P 330162-93-1P  
 330162-94-2P 330162-97-5P 330162-98-6P  
 330162-99-7P 330163-00-3P 330163-01-4P  
 RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of polyamines as therapeutic and diagnostic agents)

RN 134950-94-0 CAPLUS

CN Pentanamide, 2-amino-5-[(aminoiminomethyl)amino]-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (2S)- (9CI) (CA INDEX NAME)

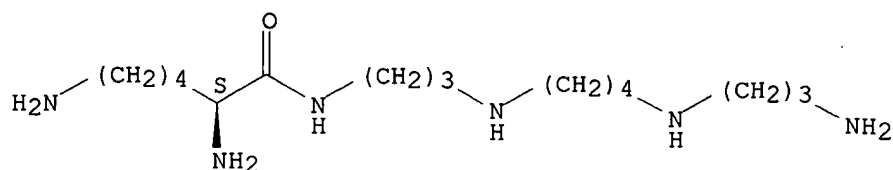
Absolute stereochemistry.



RN 134951-06-7 CAPLUS

CN Hexanamide, 2,6-diamino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (2S)- (9CI) (CA INDEX NAME)

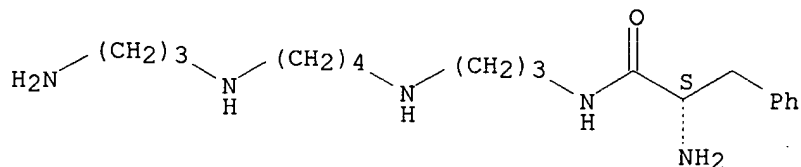
Absolute stereochemistry.



RN 207501-47-1 CAPLUS

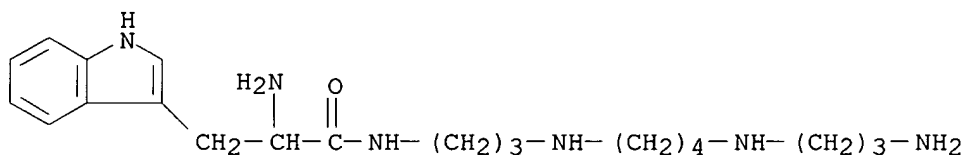
CN Benzenepropanamide, .alpha.-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



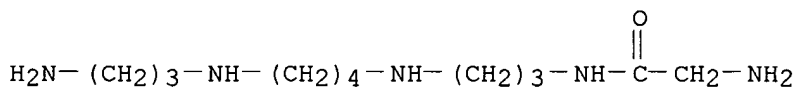
RN 220221-40-9 CAPLUS

CN 1H-Indole-3-propanamide, .alpha.-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]- (9CI) (CA INDEX NAME)



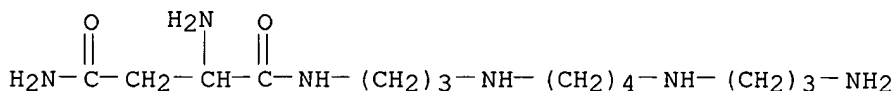
RN 220221-58-9 CAPLUS

CN Acetamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]- (9CI) (CA INDEX NAME)



RN 220221-61-4 CAPLUS

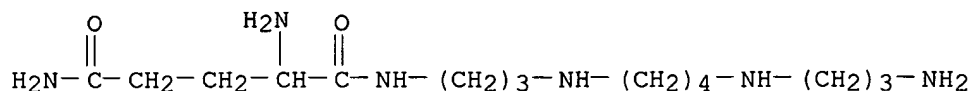
CN Butanediamide, 2-amino-N1-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]- (9CI) (CA INDEX NAME)



RN 220221-68-1 CAPLUS

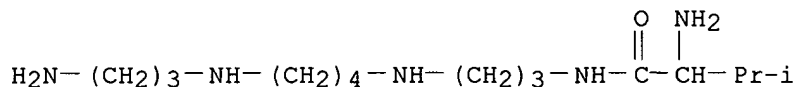
CN Pentanediamide, 2-amino-N1-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-

] - (9CI) (CA INDEX NAME)



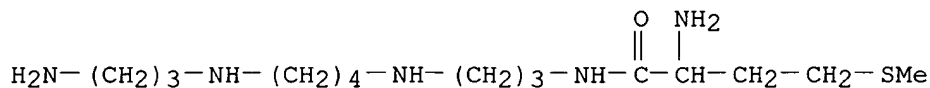
RN 220221-70-5 CAPLUS

CN Butanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-3-methyl- (9CI) (CA INDEX NAME)



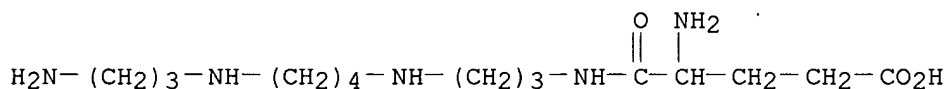
RN 220221-75-0 CAPLUS

CN Butanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-4-(methylthio)- (9CI) (CA INDEX NAME)



RN 220221-77-2 CAPLUS

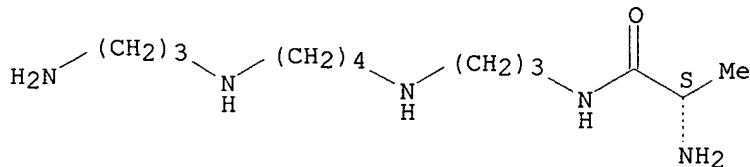
CN Pentanoic acid, 4-amino-5-[[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]amino]-5-oxo- (9CI) (CA INDEX NAME)



RN 220221-83-0 CAPLUS

CN Propanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

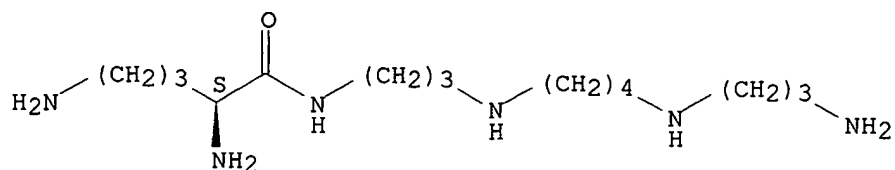


RN 287968-61-0 CAPLUS

CN Pentanamide, 2,5-diamino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



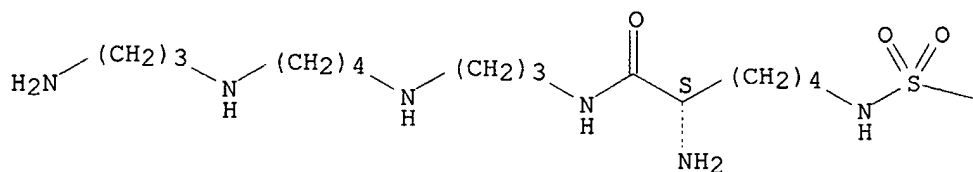


RN 330162-58-8 CAPLUS

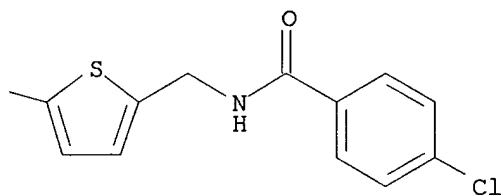
CN Benzamide, N-[[5-[[[(5S)-5-amino-6-[[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]amino]-6-oxohexyl]amino]sulfonyl]-2-thienyl]methyl]-4-chloro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

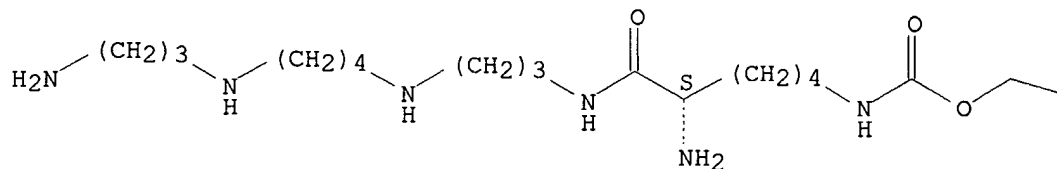


RN 330162-75-9 CAPLUS

CN 2,9,13,18-Tetraazaheneicosanoic acid, 7,21-diamino-8-oxo-, phenylmethyl ester, (7S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

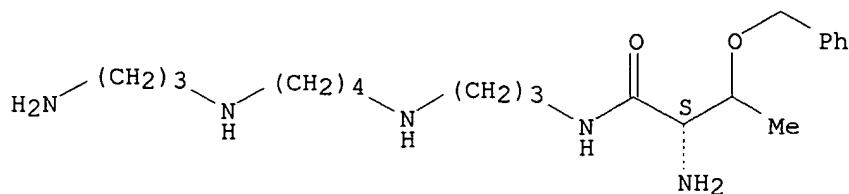


PAGE 1-B

Ph

RN 330162-78-2 CAPLUS  
 CN Butanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-3-(phenylmethoxy)-, (2S)- (9CI) (CA INDEX NAME)

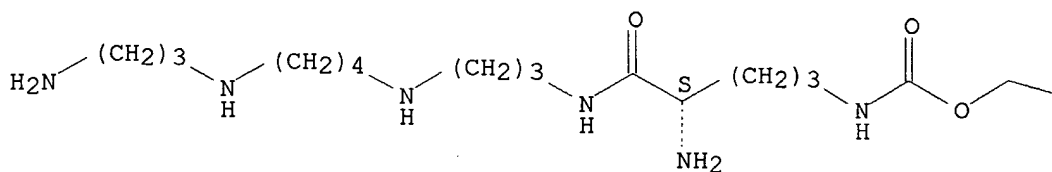
Absolute stereochemistry.



RN 330162-81-7 CAPLUS  
 CN 2,8,12,17-Tetraazaeicosanoic acid, 6,20-diamino-7-oxo-, phenylmethyl ester, (6S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

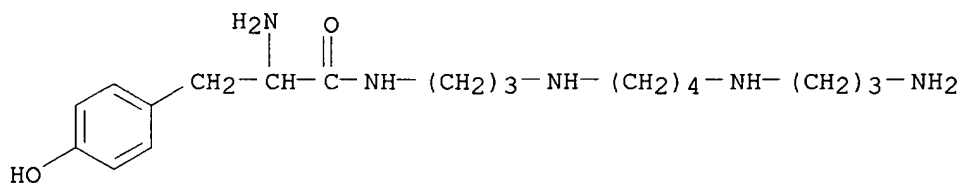
PAGE 1-A



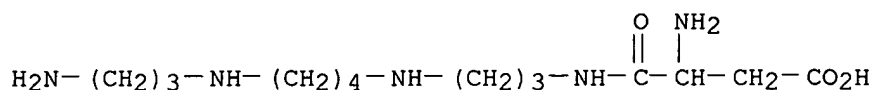
PAGE 1-B

Ph

RN 330162-89-5 CAPLUS  
 CN Benzenepropanamide, .alpha.-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-4-hydroxy- (9CI) (CA INDEX NAME)

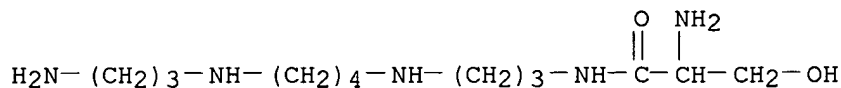


RN 330162-90-8 CAPLUS  
 CN Butanoic acid, 3-amino-4-[[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]amino]-4-oxo- (9CI) (CA INDEX NAME)



RN 330162-91-9 CAPLUS

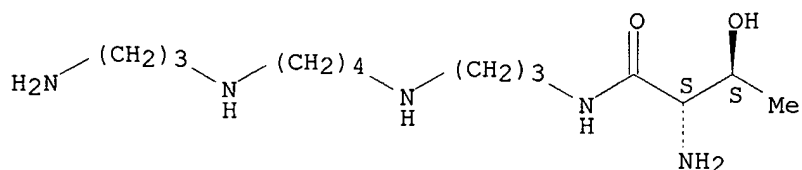
CN Propanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-3-hydroxy- (9CI) (CA INDEX NAME)



RN 330162-92-0 CAPLUS

CN Butanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-3-hydroxy-, (2S,3S)- (9CI) (CA INDEX NAME)

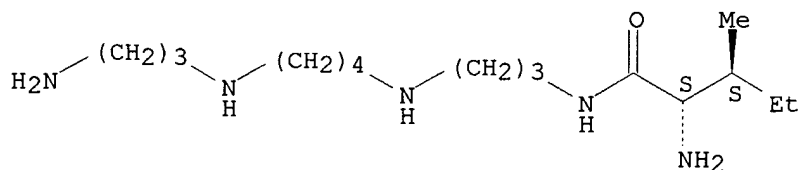
Absolute stereochemistry.



RN 330162-93-1 CAPLUS

CN Pentanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-3-methyl-, (2S,3S)- (9CI) (CA INDEX NAME)

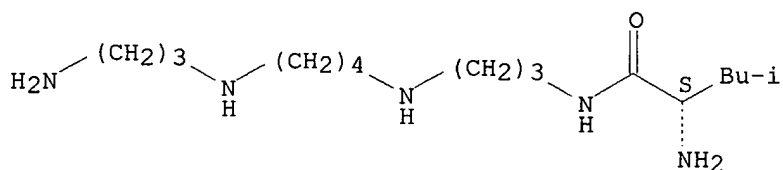
Absolute stereochemistry.



RN 330162-94-2 CAPLUS

CN Pentanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

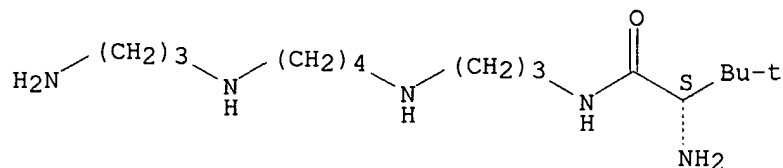


RN 330162-97-5 CAPLUS

CN Butanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-3,3-

dimethyl-, (2S)- (9CI) (CA INDEX NAME)

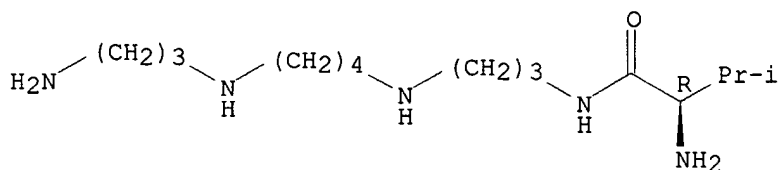
Absolute stereochemistry.



RN 330162-98-6 CAPLUS

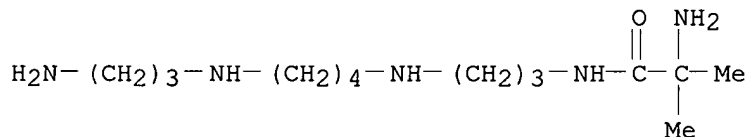
CN Butanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-3-methyl-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 330162-99-7 CAPLUS

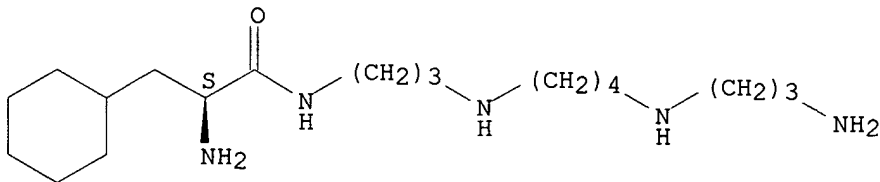
CN Propanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-2-methyl- (9CI) (CA INDEX NAME)



RN 330163-00-3 CAPLUS

CN Cyclohexanepropanamide, .alpha.-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (.alpha.S)- (9CI) (CA INDEX NAME)

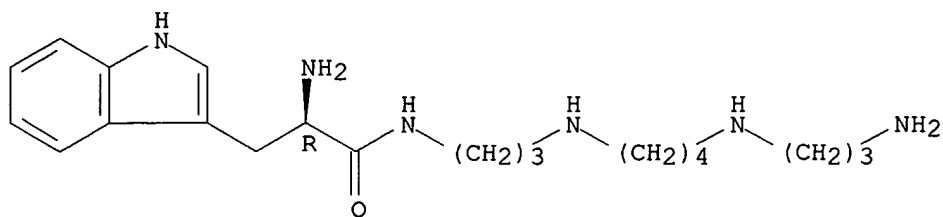
Absolute stereochemistry.



RN 330163-01-4 CAPLUS

CN 1H-Indole-3-propanamide, .alpha.-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (.alpha.R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2002 ACS

AN 2001:120148 CAPLUS

DN 135:116720

TI Polyamine depletion therapy in prostate cancer

AU Devens, B. H.; Weeks, R. S.; Burns, M. R.; Carlson, C. L.; Brawer, M. K.

CS Oridigm Corporation, Seattle, WA, 98133, USA

SO Prostate Cancer and Prostatic Diseases (2000), 3(4), 275-279

CODEN: PCPDFW; ISSN: 1365-7852

PB Nature Publishing Group

DT Journal

LA English

AB The prostate gland has among the highest level of polyamines in the body and prostate carcinomas have even higher polyamine concns. Attempts to limit tumor growth by inhibition of polyamine synthesis have not been very successful since cells have the capacity to take up polyamines from the blood. This work reports studies utilizing polyamine depletion by means of a combination of blockade of polyamine synthesis with DFMO (.alpha.-difluoromethylornithine), an inhibitor of ornithine decarboxylase, the rate-limiting enzyme in the polyamine-synthetic pathway, and ORI 1202, a novel inhibitor of polyamine transport into the cell. This cytostatic combination, even in the presence of excess extracellular polyamines, slowed the growth of the human prostate tumor cell line PC-3 grown in tissue culture, with an EC50 in the micromolar range. Other prostate cell lines were similarly growth inhibited, including LNCaP.FGC and DU145. Growth of the PC-3 tumor cell line as a xenograft in nude mice was also slowed by this combination of compds. Polyamine concns. in the tumor were lowered from control values. This combination therapy could provide an effective and potentially nontoxic therapy for prostate tumors.

IT 134951-06-7

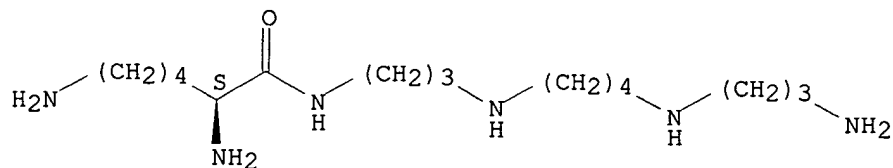
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

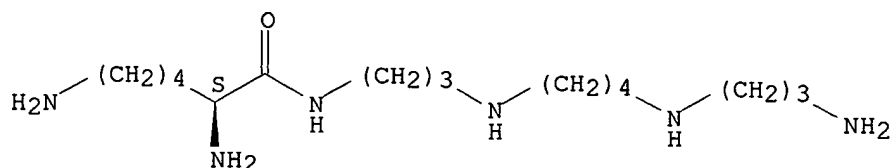
(polyamine depletion therapy in prostate cancer by treatment with)

RN 134951-06-7 CAPLUS

CN Hexanamide, 2,6-diamino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.





RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2002 ACS

AN 2000:808449 CAPLUS

DN 134:141470

TI Novel lysine-spermine conjugate inhibits polyamine transport and inhibits cell growth when given with DFMO

AU Weeks, Reitha S.; Vanderwerf, Scott M.; Carlson, C. Lance; Burns, Mark R.; O'Day, Christine L.; Cai, Feng; Devens, Bruce H.; Webb, Heather K.

CS Oridigm Corporation, Seattle, WA, 98103, USA

SO Experimental Cell Research (2000), 261(1), 293-302

CODEN: ECREAL; ISSN: 0014-4827

PB Academic Press

DT Journal

LA English

AB Polyamines are ubiquitous mols. with multiple intracellular functions. Cells tightly regulate their levels through feedback mechanisms affecting synthesis, intracellular conversion, and transport. Because polyamines have an important role in regulating cell growth, they are a target for cancer therapeutic development. However, to effectively inhibit cell growth through polyamine depletion one needs to inhibit both polyamine synthesis and import. Although the mammalian polyamine transporter has not been cloned, we have identified ORI 1202, an N1-spermine-L-lysiny amide, as an effective polyamine transport inhibitor. ORI 1202 prevents the cellular accumulation of [3H]spermidine over a 20-h test period. ORI 1202 (30-100 .mu.M) effectively inhibits cell growth when used in conjunction with the polyamine synthesis inhibitor .alpha.-difluoromethylornithine (DFMO; .gtoreq.230 .mu.M). Human breast, prostate, and bladder carcinoma cell lines and melanoma cell lines show ORI 1202 EC50 values in the low micromolar range when tested in conjunction with DFMO. This cytostatic effect correlates with a redn. in the intracellular levels of putrescine and spermidine. When ORI 1202 (45 mg/kg, i.p., tidx5) and DFMO (1% in drinking water) were delivered over 14 days, MDA-MB-231 breast tumor xenografts in nude mice showed 50% growth inhibition. Polyamine depletion therapy provides a cytostatic therapy that could be useful against cancer and other diseases resulting from uncontrolled cell growth. (c) 2000 Academic Press.

IT 134951-06-7, ORI 1202

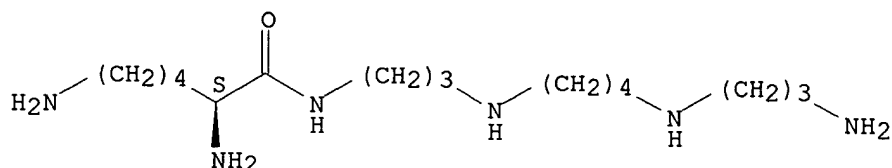
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(novel lysine-spermine conjugate, ORI 1202 inhibits polyamine transport and inhibits cell growth when given with DFMO)

RN 134951-06-7 CAPLUS

CN Hexanamide, 2,6-diamino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2002 ACS  
AN 2000:553544 CAPLUS  
DN 133:164201  
TI Preparation of agmatine and polyamine analogs as antizyme modulators for  
use as drugs and agricultural agents  
IN Vermeulin, Nicolaas M. J.; Burns, Mark R.; Webb, Heather K.  
PA Oridigm Corporation, USA  
SO PCT Int. Appl., 80 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

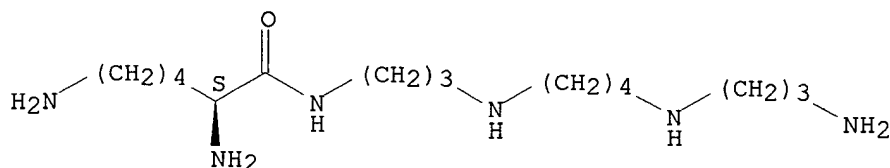
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000046187	A2	20000810	WO 2000-US2972	20000204
	WO 2000046187	A3	20001214		
	W:	AL, AM, AU, AZ, BA, BB, BG, BR, CA, CN, CU, CZ, EE, FI, GE, HU, IL, IS, JP, KG, KP, KR, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
				US 1999-118892PP	19990205
EP	1159261	A2	20011205	EP 2000-913365	20000204
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
				US 1999-118892PP	19990205
				WO 2000-US2972 W	20000204

AB A polyamine analog of spermine comprising of four amine groups capable of forming four pos. charges at physiolo. pH, wherein the first and second amine groups, and the third and fourth amine groups, are sepd. by the distance of four C-C and or C-N bonds and the second and third amine are sepd. by the distance of five C-C and/or C-N bonds or more; wherein the the second and third amines are sepd. by a straight or branched C2-10-alkyl, -alkenyl, -alkynyl, alkoxy, aliph.; C3-10-alicyclic, single or multi-ring arom. or aryl; aryl-substituted alkyl, alkenyl, alkynyl; multiring aryl-substituted aliph.; aliph.-substituted single or multi-ring arom.; alkyl-, alkenyl-, alkynyl-substituted aryl; single or multi-ring heterocyclic; single or multi-ring heterocyclic-substituted aliph.; aliph.-substituted arom.; heterocyclic-substituted alkyl, alkenyl, alkynyl; alkyl-, alkenyl-, alkynyl-substituted heterocycle and wherein said analog induces expression of full-length antizyme. The present invention is directed to agmatine and polyamine analogs and their use as drugs, as well as agricultural or environmentally useful agents. As drugs, the analogs decrease cellular polyamine levels, possibly by inducing antizyme, and can be used to treat disorders of undesired cell proliferation, including cancer, viral infections and bacterial

infections. The analogs may be utilized in pharmaceutical compns. either alone or in combination with other agents, particularly other inhibitors of polyamine synthesis or transport, but including other inhibitors of cell proliferation. The analogs are not necessarily metabolized to contribute to the polyamine pool and are designed to enter cells by pathways independent of polyamine transport. The invention further defines structural elements/motifs within these analogs that are key to their induction of antizyme.

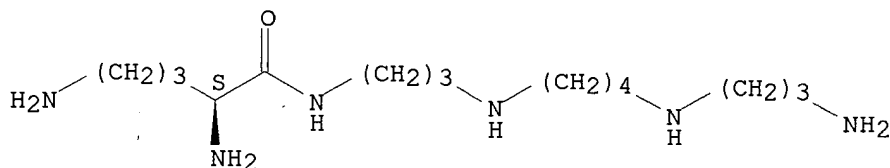
IT **134951-06-7P**, N1-(L-Lysyl)spermine **287968-61-0P**,  
 N1-(L-Ornithyl)spermine **287968-62-1P**, N1-(L-Valyl)spermine  
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of agmatine and polyamine analogs as antizyme modulators for use as drugs and agricultural agents)  
 RN 134951-06-7 CAPLUS  
 CN Hexanamide, 2,6-diamino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



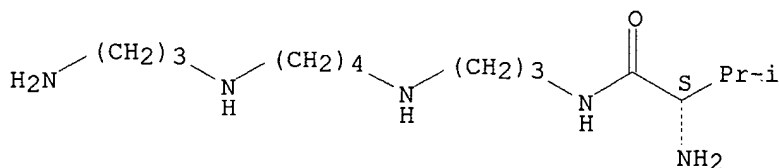
RN 287968-61-0 CAPLUS  
 CN Pentanamide, 2,5-diamino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 287968-62-1 CAPLUS  
 CN Butanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-3-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2002 ACS



AN 1999:77533 CAPLUS  
 DN 130:153469  
 TI Novel polyamine analogs as therapeutic and diagnostic agents  
 IN Vermeulin, Nicolaas M. J.; O'Day, Christine L.; Webb, Heather K.; Burns, Mark R.; Bergstrom, Donald E.  
 PA Oridigm Corporation, USA  
 SO PCT Int. Appl., 143 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9903823	A2	19990128	WO 1998-US14896	19980715
	WO 9903823	A3	19990408		
	W:	AL, AM, AU, AZ, BA, BB, BG, BR, CA, CN, CU, CZ, EE, FI, GE, HU, IL, IS, JP, KG, KP, KR, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
				US 1997-52586P	P 19970715
				US 1997-65728P	P 19971114
				US 1998-85538P	P 19980515
AU	9884968	A1	19990210	AU 1998-84968	19980715
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				US 1997-65728P	P 19971114
				US 1998-85538P	P 19980515
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EP	1001927	A2	20000524	EP 1998-935790	19980715
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
				US 1997-52586P	P 19970715
				US 1997-65728P	P 19971114
				US 1998-85538P	P 19980515
				WO 1998-US14896W	19980715
JP	2001510181	T2	20010731	JP 2000-503054	19980715
				US 1997-52586P	P 19970715
				US 1997-65728P	P 19971114
				US 1998-85538P	P 19980515
				WO 1998-US14896W	19980715
US	6172261	B1	20010109	US 1999-341400	19990903
				US 1997-52586P	P 19970715
				US 1997-65728P	P 19971114
				US 1998-85538P	P 19980515
				WO 1998-US14896W	19980715

OS MARPAT 130:153469

AB Title inhibitors RXR1 [ R =H, or is a head group consisting of a straight or branched C1-10 aliph., alicyclic, single or multiring arom., single or multiring aryl substituted aliph., etc.; R1 is a polyamine; X = CO, NHCO, NHCS, SO2] and pharmaceutical acceptable salts of polyamine transport having inhibition consts. two orders of magnitude lower than those of known compds. are disclosed. These polyamine analogs are useful pharmaceutical agents for treating diseases where it is desired to inhibit polyamine transport or other polyamine binding proteins, for example cancer and post-angioplasty injury and the introduction of a 3-amidopropyl group to the diaminobutyl part of spermidine produce a significantly better transport inhibitor. Novel chem. synthetic methods to obtain

polyamine analogs are disclosed, including the prodn. of a combinatorial polyamine library. These approaches yield analogs with desirable activities both for diagnostic and research assays and therapy. The assays of the invention are useful for high throughput screening of targets in the discovery of drugs that interact with the polyamine system. Thus, I was prepd. from 1-aminoanthracene, 4-nitrophenyl chloroformate, and spermine.

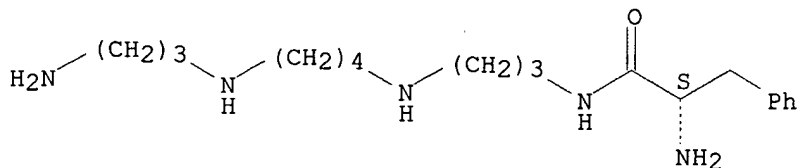
IT 207501-47-1P 220221-40-9P 220221-58-9P  
220221-61-4P 220221-68-1P 220221-70-5P  
220221-75-0P 220221-77-2P 220221-83-0P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(prepn. of polyamines as therapeutic and diagnostic agents)

RN 207501-47-1 CAPLUS

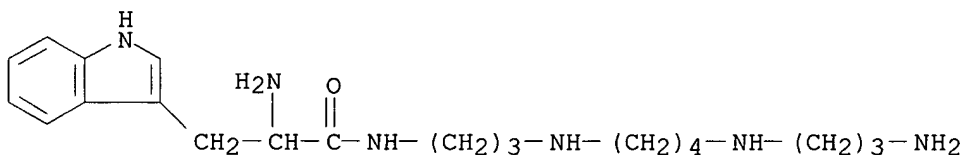
CN Benzenepropanamide, .alpha.-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



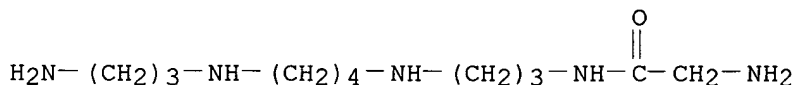
RN 220221-40-9 CAPLUS

CN 1H-Indole-3-propanamide, .alpha.-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]- (9CI) (CA INDEX NAME)



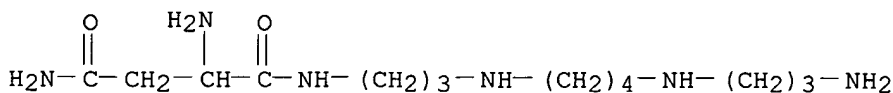
RN 220221-58-9 CAPLUS

CN Acetamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]- (9CI) (CA INDEX NAME)

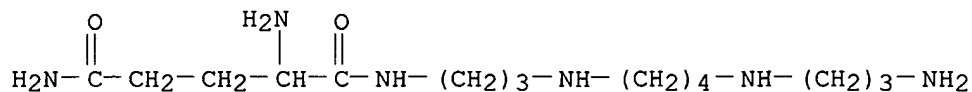


RN 220221-61-4 CAPLUS

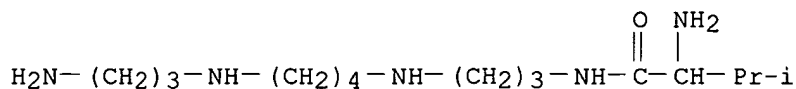
CN Butanediamide, 2-amino-N1-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]- (9CI) (CA INDEX NAME)



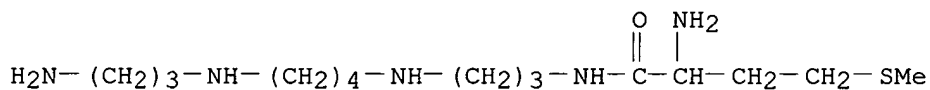
RN 220221-68-1 CAPLUS  
 CN Pentanediamide, 2-amino-N1-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]- (9CI) (CA INDEX NAME)



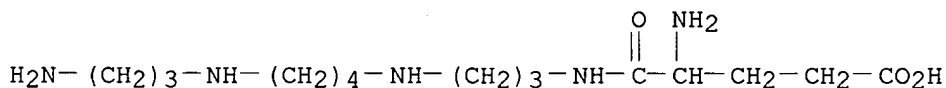
RN 220221-70-5 CAPLUS  
 CN Butanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-3-methyl- (9CI) (CA INDEX NAME)



RN 220221-75-0 CAPLUS  
 CN Butanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-4-(methylthio)- (9CI) (CA INDEX NAME)

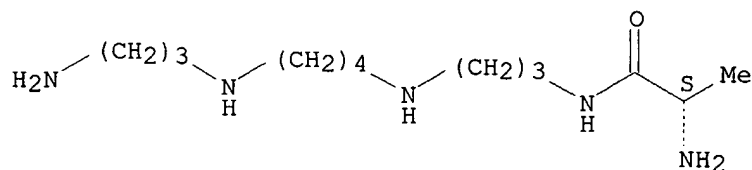


RN 220221-77-2 CAPLUS  
 CN Pentanoic acid, 4-amino-5-[[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]amino]-5-oxo- (9CI) (CA INDEX NAME)



RN 220221-83-0 CAPLUS  
 CN Propanamide, 2-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2002 ACS  
 AN 1998:220203 CAPLUS  
 DN 129:4517  
 TI Solid phase organic synthesis of polyamine derivatives and initial

biological evaluation of their antitumoral activity

AU Tomasi, Sophie; Le Roch, Myriam; Renault, Jacques; Corbel, Jean-Charles; Uriac, Philippe; Carboni, Bertrand; Moncoq, Damien; Martin, Benedicte; Delcros, Jean-Guy

CS Pharmacochimie de Molecules de Synthese et de Produits Naturels, Fac. de Pharmacie, Rennes, 35043, Fr.

SO Bioorg. Med. Chem. Lett. (1998), 8(6), 635-640  
CODEN: BMCLE8; ISSN: 0960-894X

PB Elsevier Science Ltd.

DT Journal

LA English

AB A series of N1-monosubstituted putrescine and spermine derivs. was synthesized using a solid phase methodol. Their cytotoxicity, calmodulin antagonism and polyamine uptake inhibition, pharmacol. properties shared by some antitumoral agents was evaluated.

IT **207501-48-2P**  
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(solid phase org. synthesis of polyamine derivs. and initial biol. evaluation of antitumoral activity)

RN 207501-48-2 CAPLUS

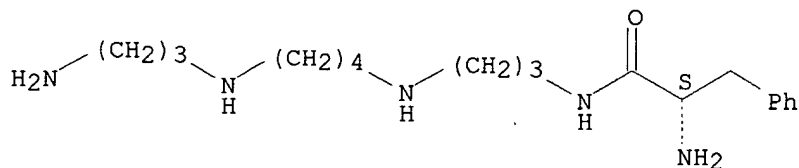
CN Benzenepropanamide, .alpha.-amino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (.alpha.S)-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 207501-47-1

CMF C19 H35 N5 O

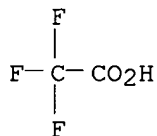
Absolute stereochemistry.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



L4 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2002 ACS

AN 1991:442004 CAPLUS

DN 115:42004

TI Use of polyamines as calcium channel regulating agents

IN Cherksey, Bruce D.; Llinas, Rodolfo R.; Sugimori, Mutsuyuki  
 PA New York University, USA  
 SO PCT Int. Appl., 56 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9100853	A1	19910124	WO 1990-US3771	19900703
	W: AU, CA, FI, HU, JP, KR, SU, US, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
				US 1989-375776	19890703
				US 1989-427333	19891026
	CA 2062810	AA	19910104	CA 1990-2062810	19900703
				US 1989-375776	19890703
				US 1989-427333	19891026
	AU 9059573	A1	19910206	AU 1990-59573	19900703
				US 1989-375776	19890703
				US 1989-427333	19891026
				WO 1990-US3771	19900703
	ZA 9005187	A	19920325	ZA 1990-5187	19900703
				US 1989-375776	19890703
	JP 05500357	T2	19930128	JP 1990-510172	19900703
				US 1989-427333	19891026
				WO 1990-US3771	19900703
	EP 597830	A1	19940525	EP 1990-911163	19900703
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE				
				US 1989-375776	19890703
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				WO 1990-US3771	19900703
	US 5432202	A	19950711	US 1993-71768	19930609
				US 1988-154845	19880210
				US 1988-219105	19880714
				US 1989-375776	19890703
				US 1992-817900	19920103

PATENT FAMILY INFORMATION:

FAN 1990:135587

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 8907608	A1	19890824	WO 1989-US558	19890210
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				US 1988-154845	19880210
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				US 1988-219105	19880714
				WO 1989-US558	19890210
	EP 357730	A1	19900314	EP 1989-902889	19890210
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				US 1988-154845	19880210
				US 1988-219105	19880714
				WO 1989-US558	19890210

DK 8904981 A 19891204

DK 1989-4981 19891009

US 1988-154845 19880210

US 1988-219105 19880714

WO 1989-US558 19890210

US 5432202 A 19950711

US 1993-71768 19930609

US 1988-154845 19880210

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US 1992-817900 19920103

FAN 1993:552118

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 9312777	A1	19930708	WO 1992-US11352	19921231
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W: AU, CA, JP

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

US 1992-817900 19920103

US 5242947 A 19930907

US 1992-817900 19920103

US 1988-154845 19880210

US 1988-219105 19880714

US 1989-375776 19890703

AU 9334283 A1 19930728

AU 1993-34283 19921231

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WO 1992-US11352 19921231

US 5432202 A 19950711

US 1993-71768 19930609

US 1988-154845 19880210

US 1988-219105 19880714

US 1989-375776 19890703

US 1992-817900 19920103

OS MARPAT 115:42004

AB Polyamines R(CH<sub>2</sub>)<sub>x</sub>NH(CH<sub>2</sub>)<sub>y</sub>NH<sub>2</sub> (R = nonarom. contg. .gtoreq.1 amino, imino, amido, imido, and/or may be appended by CX<sub>2</sub>ONH; X = H, NH<sub>2</sub>; x = 0-15; y = 1-15; with provisions) are used to modulate, block or stimulate Ca channels resistant to dindropyridine, conotoxin, and octanol. Thus, NH<sub>2</sub>(CH<sub>2</sub>)<sub>4</sub>CH(NH<sub>2</sub>)CONH(CH<sub>2</sub>)<sub>4</sub>NH(CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub> increased the dosage of Nembutal necessary to anesthetize rats.

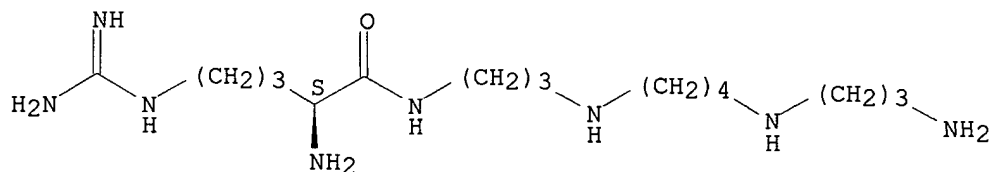
IT 134950-94-0 134951-06-7

RL: BIOL (Biological study)  
(calcium channel regulator)

RN 134950-94-0 CAPLUS

CN Pentanamide, 2-amino-5-[(aminoiminomethyl)amino]-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (2S)- (9CI) (CA INDEX NAME)

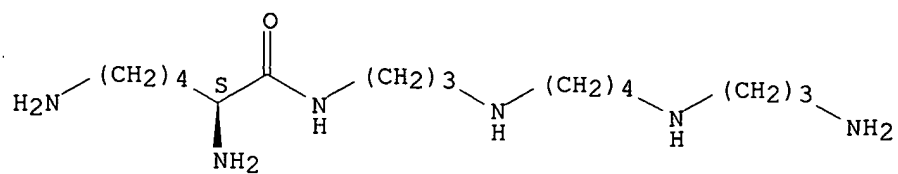
Absolute stereochemistry.



RN 134951-06-7 CAPLUS

CN Hexanamide, 2,6-diamino-N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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